No. 200700330

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Cooperative Elevator Co.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, FIELD

'HMS Medalist'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixteenth day of May, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY, *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Cooperative Elevator Co.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
01054

3. VARIETY NAME
'HMS MEDALIST' WAW 4/22/08

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
7211 E. Michigan Ave.
Pigeon, MI 48755

5. TELEPHONE *(Include area code)*
989-453-4500

6. FAX *(Include area code)*
989-453-3942

FOR OFFICIAL USE ONLY

PVPO NUMBER
#200700330

FILING DATE
MAY 17, 2007

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Michigan

9. DATE OF INCORPORATION
11-15-1915

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Ron Shellenberger
ProVita, Inc.
P.O. Box 628
Kuna, ID 83634

FEES RECEIVED
FILING AND EXAMINATION FEES: $ 4,382.00 DATE 5/17/07
CERTIFICATION FEE: $ 768.00 DATE 4/17/08

11. TELEPHONE (Include area code)
208-463-7624

12. FAX (Include area code)
208-442-6433

13. E-MAIL
ron@provita-inc.com

14. CROP KIND *(Common Name)*
Dry Edible Bean

16. FAMILY NAME *(Botanical)*
Leguminosae

15. GENUS AND SPECIES NAME OF CROP
Phaseolus vulgaris

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? *(OPTIONAL)*
☐ YES ☒ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION.

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
(Follow instructions on reverse)

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☒ Exhibit F. Declaration Regarding Deposit
g. ☒ Voucher Sample *(3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☒ Filing and Examination Fee ($4,382), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *(See Section 83(e) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 21 and 22 below)* ☒ NO *(If "no", go to item 23)*

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☐ YES ☐ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
FOUNDATION ☐ REGISTERED ☐ CERTIFIED ☐
(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Patricia Anderson			
NAME *(Please print or type)*		NAME *(Please print or type)*	
Patricia Anderson			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
CEO	05/08/2007		

(See reverse for instructions and information collection burden statement)

#200700330

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for $4,382 ($518 filing fee and $3,864 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice).* **NEW:** With the application for a seed reproduced variety **or by direct deposit soon after filing**, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to **reproduce** the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of $768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVPOmail@usda.gov **Homepage:** http://www.ams.usda.gov/science/pvpo/PVPindex.htm

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870.

http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively; (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

20. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

23. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

24. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

See Explanation of Seed Sales

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

Explanation of Seed Sales

Question #23 from ST-470 Form (first sales of seed) continued

The following sales were made for disposition as an integral part of a program of experimentation and testing to ascertain the characteristics of the variety as provided for under Title II, sec. 15 of the Plant Variety Protection Act.

Cooperative Elevator Co. has received exclusive marketing rights for pinto, black, and small red varieties in Michigan from AmeriSeed. This background information is important to understand when looking at the trialing conducted by Cooperative Elevator Company in Michigan and the trialing AmeriSeed, LLC. pursued in North Dakota.

AmeriSeed used two specific dealers in North Dakota to evaluate the navy bean '01054'. Central Valley Bean Cooperative was a company AmeriSeed already used for trialing their own varieties in North Dakota and sells a limited amount of navy beans in North Dakota. AmeriSeed also included ADM - Seedwest in the trialing process. ADM - Seedwest is probably the single largest user of navy bean seed in North Dakota and adaptability of this variety for this company was critical. Evaluations with the aforementioned producers were needed to provide data on the following two points: 1. adaptation to the growing regions and 2. advantage to the industry over the current varieties in use (Norstar, Navigator, Ensign, etc.). Some of the characteristics we looked for in these trials were yield, maturity, plant architecture, ease of harvest, direct harvestability, seed size, seed color, % grade out at receiving, and end use acceptability.

- In 2006 sales for research and evaluation of navy '01054' in North Dakota, were made to ADM - Seedwest and Central Valley Bean Company. These sales amounted to 103,399 lbs. for use in adaptability trials throughout North Dakota.

Cooperative Elevator Co. did their own evaluations of the variety throughout Michigan. They sought input from their growers on whether the variety was 1. adapted to the regions 2. whether the variety provided an advantage over current varieties being used by the industry and 3. whether this variety was suitable for direct harvest. In 2006 they did a large scale test of direct harvestability with a grower. In this test Cooperative Elevator sought out a grower that was already direct harvesting beans and had him try the 01054 in a direct harvest situation. The grower planted approximately 400 AC in several locations compared to standard varieties and provided Cooperative Elevator and ProVita

and ProVita with feedback on how the crop performed relative to varieties he had used in the past.

Cooperative Elevator was also interested in the canning results of this variety and did extensive canning trials including a commercial canning trial in 2005. They also used product in 2005 and 2006 to test end-use acceptability of the variety.

- In 2005 sales for research and evaluation of navy '01054' in Michigan, were made to Cooperative Elevator growers. These sales amounted to 3,700 lbs. for use in adaptability trials throughout Michigan.

- In 2006 sales for research and evaluation of navy '01054' in Michigan, were made to Cooperative Elevator growers. These sales amounted to 135,195 lbs. for use in adaptability trials throughout Michigan.

Exploitation of this variety will begin in 2007 under the name '01054' (unless named before then). After gathering information from the above trials we have concluded that '01054' is broadly adapted to North Dakota and Michigan and provides an advantage to the industry in yield, ease of harvest, end use acceptability, canning, and plant architecture. Upon starting the PVP process this variety is being named and sold commercially (exploited) throughout North Dakota, Michigan, and the United States.

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Exhibit A

Origin and Breeding History of
Navy Bean ~~01054~~ 'HMS MAYFLOWER' new 4/22/08

In the greenhouse of the fall of 1996 a cross was made between navy bean variety 'Mayflower', as the female parent, and navy bean variety 'Avanti', as the male parent. Navy '01054' was derived from the progeny of this cross. Following is an outline of the selection, testing, and multiplication. The selection criteria were upright architecture for direct harvest, improved canning characteristics, broad scale adaptability for Michigan, North Dakota, Minnesota, and increased yield.

Fall 1996 Greenhouse 'Mayflower' X 'Avanti'

Year	Location	Generation	Plot #	Bulk lbs.	Single Plant Selections
Spring 1997	Greenhouse	1	GH97-870	.2	
Summer 1997	Twin Falls, ID	2	97-966-5		7
Summer 1998	Twin Falls, ID	3	98-1359-2		2
Summer 1999	Twin Falls, ID	4	99-1208		1
Summer 2000	Twin Falls, ID	5	00-1234		1
Summer 2001	Twin Falls, ID	6	01-054	1.5	1
Summer 2002	Nampa, ID	7	02-7033	35	
Summer 2003	Nampa, ID	8	ND3881	500	
Summer 2004		9	Seed increase and testing. Found to be uniform and stable.		
Summer 2005		10	Seed increase and testing. Found to be uniform and stable.		
Summer 2006		11	Seed increase and testing. Found to be uniform and stable.		

By carefully evaluating seed stocks in the field on a plant by plant basis during the years 2004 through 2006 this new navy bean variety 01054 has been found to be uniform, stable, and free of any genetic variants since the F8 generation.

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Dry Edible Navy Bean

'HMS MEDALIST'
~~'01054'~~ LWW 4/22/08

Exhibit B

Novelty Statement

The following charts show the differences between '01054' and 'Vista':

2007 '01054' vs 'Vista' T-Test Results

Characteristic	Units	'01054'	'Vista'	Probability	Sample size
Beak Length	mm	10.00	6.40	0.0000	20
Seeds/pod	no.	5.90	5.40	0.1527	20
Pod Length	mm	92.65	88.75	0.0503	20
Pod Depth	mm	7.93	7.73	0.0549	20
Pod Width	mm	10.00	9.78	0.0749	20

2008 '01054' vs 'Vista' T-Test Results

Characteristic	Units	'01054'	'Vista'	Probability	Sample size
Beak Length	mm	11.10	7.18	0.0000	20
Seeds/pod	no.	5.35	5.55	0.4057	20
Pod Length	mm	87.45	87.10	0.7927	20
Pod Depth	mm	7.74	8.19	0.0000	20
Pod Width	mm	9.98	10.03	0.7398	20

'01054' is most like the navy variety 'Vista' but differs from 'Vista' in the following ways:

- Based on the above t-test results '01054' has a longer beak than 'Vista'. Averaging the means for 2007-2008 shows 01054's beak length to be 10.55 mm; compared to Vista's beak length at 6.79 mm.

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The following charts show the differences between ~~'01054'~~ 'HMS MEDALIST' and 'Seafarer': LAH 4/22/08

2004 '01054' vs 'Seafarer' T-Test Results

Characteristic	Units	'01054'	'Seafarer'	Probability	Sample size
Maturity (90%)	days	91	77	NS	1
Flowering (50%)	days	52	43	NS	1
Plant Height	cm.	61	38	NS	1
Beak Length	mm.	9.10	5.10	0.0000	20
Vine Length	in.	35.00	15.75	0.0000	20
Seeds/pod	no.	5.45	4.15	0.0022	20
Seeds/lb.	no.	2,291	2,293	NS	1

2005 '01054' vs 'Seafarer' T-Test Results

Characteristic	Units	'01054'	'Seafarer'	Probability	Sample size
Maturity (90%)	days	104	92	NS	1
Flowering (50%)	days	54	44	NS	1
Plant Height	cm.	61	41	NS	1
Beak Length	mm.	8.90	6.05	0.0000	20
Vine Length	in.	29.10	17.48	0.0000	20
Seeds/pod	no.	5.15	4.95	0.5901	20
Pod Length	mm.	90.55	78.80	0.0000	20
Pod Depth	mm.	8.28	7.30	0.0000	20
Pod Width	mm.	10.23	10.00	0.1572	20
Seeds/lb.	no.	2,447	2,248	NS	1

2006 '01054' vs 'Seafarer' T-Test Results

Characteristic	Units	'01054'	'Seafarer'	Probability	Sample size
Maturity (90%)	days	93	87	NS	1
Flowering (50%)	days	52	42	NS	1
Plant Height	cm.	61	46	NS	1
Beak Length	mm.	10.63	6.25	0.0000	20
Seeds/pod	no.	5.90	4.50	0.0028	20
Pod Length	mm.	90.38	81.40	0.0004	20
Pod Depth	mm.	8.36	8.43	0.6238	20
Pod Width	mm.	10.41	10.60	0.4389	20
Seeds/lb.	no.	2,522	2,000	NS	1

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'HMS MEDALIST'

- Based on the above t-test results ~~'01054'~~ has a longer beak than 'Seafarer'. Averaging the means for 2004-2006 shows 01054's beak length to be 9.54 mm; compared to Seafarer's beak length at 5.80 mm.

- Based on the above t-test results '01054' has a longer pod than Seafarer. Averaging the means for 2005-2006 shows 01054's pod length to be 90.47 mm; compared to Seafarer's pod length at 80.10 mm.

- Based on the above t-test results '01054' has a longer vine length than Seafarer. Averaging the means for 2004-2005 shows 01054's vine length to be 32.05 in.; compared to Seafarer's vine length at 16.62 in.

- '01054' is a type IIb plant and 'Seafarer' is a type Ia plant.

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2007 01054 vs Vista Beak Measurement T-Test

Data file: _54VSVISTA_
Title: **2007 NA 01054 vs NA Vista**

Function: T-TEST

'HMS MEDALIST LWS 4/22/08

SAMPLE ONE: ~~01054~~		SAMPLE TWO: **Vista**	
Variable 2 : **Beak Length(mm)**		Variable 2 : **Beak Length (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	10.00	Mean:	6.40
Variance:	1.68	Variance:	0.88
Standard Deviation:	1.30	Standard Deviation:	0.94

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.9048
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.1693

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	1.2842
Variance of the difference between the means:	0.1284
Standard Deviation of the difference:	0.3584
t Value:	10.0458
Degrees of freedom:	38
Probability of t:	**0.0000**

Result: Significant t - Reject the Hypothesis
Confidence limits for the difference of the means (for alpha=0.05):
3.600 plus or minus 0.725 (2.875 through 4.325)

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2007 01054 vs Vista Seed Per Pod T-Test

Data file: _54VSVISTA_
Title: **2007 NA ~~01054~~ vs NA Vista**
'HAYSMEADALIST'
Function: T-TEST Load 4/22/08

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 1 : **Seed Per Pod**		Variable 1 : **Seed Per Pod**	
Cases 1 through 20		Cases 21 through 40	
Mean:	5.90	Mean:	5.40
Variance:	1.04	Variance:	1.31
Standard Deviation:	1.02	Standard Deviation:	1.14

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.2525
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.6285

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	1.1737
Variance of the difference between the means:	0.1174
Standard Deviation of the difference:	0.3426
t Value:	1.4595
Degrees of freedom:	38
Probability of t:	**0.1527**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.500 plus or minus 0.694 (-0.194 through 1.194)

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2003 00 330

LAH 4/22/08
'HMS MCB42187'

2007 ~~01054~~ vs Vista Pod Depth T-Test

Data file: _54VSVISTA_
Title: **2007 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 3 : **Pod Depth (mm)**		Variable 3 : **Pod Depth (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	7.93	Mean:	7.73
Variance:	0.09	Variance:	0.12
Standard Deviation:	0.29	Standard Deviation:	0.34

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.3664
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.5027

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	0.1020
Variance of the difference between the means:	0.0102
Standard Deviation of the difference:	0.1010
t Value:	1.9806
Degrees of freedom:	38
Probability of t:	**0.0549**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.200 plus or minus 0.204 (-0.004 through 0.404)

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LAW 4/22/08
'HMS MEDALIST'

2007 ~~01054~~ vs Vista Pod Length T-Test

Data file: _54VSVISTA_
Title: **2007 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 4 : **Pod Length (mm)**		Variable 4 : **Pod Length (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	92.65	Mean:	88.75
Variance:	26.24	Variance:	48.20
Standard Deviation:	5.12	Standard Deviation:	6.94

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.8368
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.1942

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	37.2184
Variance of the difference between the means:	3.7218
Standard Deviation of the difference:	1.9292
t Value:	2.0216
Degrees of freedom:	38
Probability of t:	**0.0503**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

3.900 plus or minus 3.905 (-0.005 through 7.805)

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LAW 4/22/08
'HMS MEDALIST'

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2007 ~~01054~~ vs Vista Pod Width T-Test

Data file: _54VSVISTA_
Title: **2007 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 5 : **Pod Width (mm)**		Variable 5 : **Pod Width (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	10.00	Mean:	9.78
Variance:	0.11	Variance:	0.20
Standard Deviation:	0.32	Standard Deviation:	0.44

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.8688
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.1821

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	0.1510
Variance of the difference between the means:	0.0151
Standard Deviation of the difference:	0.1229
t Value:	1.8311
Degrees of freedom:	38
Probability of t:	**0.0749**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.225 plus or minus 0.249 (-0.024 through 0.474)

LAW 4/22/08
HMS MEDALIST

200700330

2008 ~~01054~~ vs Vista Seed Per Pod T-Test

Data file: _080154_
Title: **2008 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 1 : **Seed Per Pod**		Variable 1 : **Seed Per Pod**	
Cases 1 through 20		Cases 21 through 40	
Mean:	5.35	Mean:	5.55
Variance:	0.66	Variance:	0.47
Standard Deviation:	0.81	Standard Deviation:	0.69

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.4022
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.4682

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	0.5658
Variance of the difference between the means:	0.0566
Standard Deviation of the difference:	0.2379
t Value:	-0.8408
Degrees of freedom:	38
Probability of t:	**0.4057**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.200 plus or minus 0.482 (-0.282 through 0.682)

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LAW 4/22/08
'HMS MEDALIST'

2007 00330

2008 ~~01054~~ vs Vista Beak Measurement T-Test

Data file: _080154_
Title: **2008 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 2 : **Beak (mm)**		Variable 2 : **Beak (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	11.10	Mean:	7.18
Variance:	1.28	Variance:	3.09
Standard Deviation:	1.13	Standard Deviation:	1.76

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	2.4131
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.0621

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	2.1826
Variance of the difference between the means:	0.2183
Standard Deviation of the difference:	0.4672
t Value:	8.4015
Degrees of freedom:	38
Probability of t:	**0.0000**

Result: Significant t - Reject the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

3.925 plus or minus 0.946 (2.979 through 4.871)

WAL 4/22/08
'HMS MEDALIST'

20070330

2008 ~~01054~~ vs Vista Pod Depth T-Test

Data file: _080154_
Title: **2008 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 3 : **Pod Depth (mm)**		Variable 3 : **Pod Depth (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	7.74	Mean:	8.19
Variance:	0.04	Variance:	0.08
Standard Deviation:	0.20	Standard Deviation:	0.29

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	2.0904
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.1167

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	0.0606
Variance of the difference between the means:	0.0061
Standard Deviation of the difference:	0.0779
t Value:	-5.7340
Degrees of freedom:	38
Probability of t:	**0.0000**

Result: Significant t - Reject the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.447 plus or minus 0.158 (0.289 through 0.604)

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LWS 4/22/08
'HMS MEDALIST'

20070330

2008 ~~01054~~ vs Vista Pod Length T-Test

Data file: _080154_
Title: **2008 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 4 : **Pod Length (mm)**		Variable 4 : **Pod Length (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	87.45	Mean:	87.10
Variance:	18.58	Variance:	16.41
Standard Deviation:	4.31	Standard Deviation:	4.05

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.1320
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.7898

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	17.4934
Variance of the difference between the means:	1.7493
Standard Deviation of the difference:	1.3226
t Value:	0.2646
Degrees of freedom:	38
Probability of t:	**0.7927**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.350 plus or minus 2.678 (-2.328 through 3.028)

WAW 4/22/08
'HMS MEDALIST'

20070330

2008 ~~01054~~ vs Vista Pod Width T-Test

Data file: _080154_
Title: **2008 NA 01054 vs NA Vista**

Function: T-TEST

SAMPLE ONE: **01054**		SAMPLE TWO: **Vista**	
Variable 5 : **Pod Width (mm)**		Variable 5 : **Pod Width (mm)**	
Cases 1 through 20		Cases 21 through 40	
Mean:	9.98	Mean:	10.03
Variance:	0.17	Variance:	0.26
Standard Deviation:	0.41	Standard Deviation:	0.51

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value:	1.5766
Numerator degrees of freedom:	19
Denominator degrees of freedom:	19
Probability:	0.3295

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:	0.2146
Variance of the difference between the means:	0.0215
Standard Deviation of the difference:	0.1465
t Value:	-0.3345
Degrees of freedom:	38
Probability of t:	**0.7398**

Result: Non-Significant t - Accept the Hypothesis

Confidence limits for the difference of the means (for alpha=0.05):

0.049 plus or minus 0.297 (-0.248 through 0.346)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Field Bean (*Phaseolus vulgaris* L.)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
Cooperative Elevator Co.	01054	'HMS MEDALIST' 4/22/08

ADDRESS *(Street and No. or RD No., City, State, Zip Code, and Country)*

7211 E. Michigan Ave.
Pigeon, MI 48755

FOR OFFICIAL USE ONLY

PVPO NUMBER

#200700330

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Provide data for all characters unless indicated as "optional". Place numbers in the boxes for the characters or numerical values that best describe this variety. Measured data should be the mean of an appropriate number of well spaced (15-20 cm) plants. The Royal Horticultural Society or any recognized color standard may be used to determine plant color. Designate the color system used below.

COLOR SYSTEM USED: Royal Horticulture Society

LOCATION OF THE TEST(S) TO EVALUATE THIS VARIETY: Twin Falls, ID

1. MARKET CLASS:

[0][1]

CLASS	CHECK
1 = Navy (Pea)	Seafarer
2 = Small White	Aurora
3 = Black	Midnight
4 = Pinto	UI-114
5 = Great Northern	UI-59
6 = Small Red	NW-59
7 = Pink	Viva
8 = Cranberry	UI-50
9 = Dark Red Kidney	Montclaim
10 = Light Red Kidney	Redkloud
11 = Yellow Eye	Steuben
12 = Other (Specify)_____	

2 = MATURITY:

[2] 1 = Early (80-90 days) 2 = Medium (90-100 Days) 3 = Late (> 100 Days)

[ ][9][6] Days from Planting to Harvest Maturity

[ ][ ][ ][ ] Heat Units from Planting to Harvest Maturity (Optional). Specify Base Temperature Used: _____

[ ][8][5] Days from Planting to Harvest Maturity of Check Variety (Use Check Appropriate to Market Class Shown in Item 1)

3. PLANT HABIT:

TYPE

- ○ 1 = Ia Bush-determinate, Strong and Erect Stem and Branches
- ○ 2 = Ib Bush-determinate, Weak Stem and Branches
- ○ 3 = IIa Erect Growth Habit-indeterminate, Guides (Runners) short or not developed
- ◉ 4 = IIb Erect Growth Habit-indeterminate, Guides Medium to Long, with no Ability to Climb
- ○ 5 = IIIa Vine-indeterminate, Short Guides with no ability to Climb
- ○ 6 = IIIb Vine-indeterminate, Long Guides with Ability to Climb
- ○ 7 = IVa Indeterminate Climbing, Pods Distributed Throughout the Plant
- ○ 8 = IVb Indeterminate Climbing, Pods Concentrated on the Upper Part of the Plant

[ ][6][1] Average Height of Mature Plant, in cm.

[ ][4][1] Average Height of Check Variety, in cm. (Use Same Check as Above)

[2] Pod Position: 1 = Low (Lower Pods Touching Soil Surface) 2 = High (Lower Pods not Touching Soil Surface) 3 = Scattered (Not Concentrated High or Low)

[1] Adaptability to Machine Harvest: 1 = Adapted 2 = Not Adapted

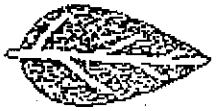
[1] Lodging Resistance: 1 = Good 2 = Fair 3 = Poor

4. LEAFLET MORPHOLOGY: (Use terminal Leaflet of a Fully Expanded Trifoliolate)

[2] 1 = Smooth 2 = Wrinkled

[3] 1 = Dull 2 = Glossy 3 = Semiglossy 4 = Variable

Shape: [1]

1 = Ovate 

2 = Lanceolate 

3 = Deltoid 

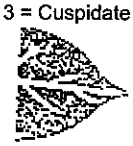
4 = Cordate 

5 = Rhomboid 

Apex of Leaflet: [2]

1 = Acute 

2 = Acuminate 

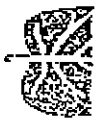
3 = Cuspidate 

4 = Obtuse 

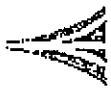
Base of Leaflet: [1]

1 = Obtuse 

2 = Oblique 

3 = Cordate 

4 = Cuneate 

5 = Attentuate 

5. FLOWER COLOR AND DAYS TO BLOOM:

[1] Color of Standard: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

[1] Color of Keel: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

[1] Color of Wings: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

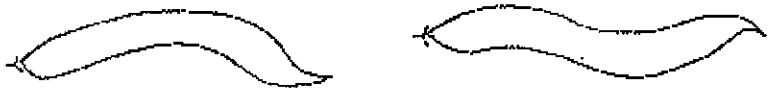
[5][3] Days to 50% Bloom

6. POD MORPHOLOGY: (Green Pod Morphology Optional)

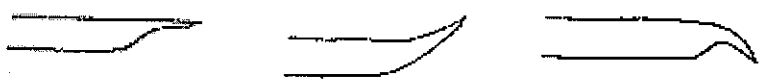
Green	Mature		
[1]	[1]	Color Pattern:	1 = Solid 2 = Striped 3 = Blotched 4 = Mottled 5 = Other _____
[3]	[4]	Primary Color:	1 = Purple 2 = Red 3 = Green 4 = Yellow 5 = Tan 6 = Brown 7 = Other _____
[3]	[2]	Color Modifier:	1 = Light 2 = Light Medium 3 = Medium 4 = Medium Dark 5 = Dark
[ ]	[ ]	Secondary Color:	1 = Purple 2 = Red 3 = Green 4 = Yellow 5 = Tan 6 = Brown 7 = Other _____
[2]	[2]	Cross Section Shape:	1 = Flat 2 = Pear 3 = Round 4 = Figure Eight

[1] [1] Pod Curvature 1 = Straight 2 = Slightly Curved

3 = Curved 4 = Recurved



[3] [3] Pod Beak Orientation: 1 = Straight 2 = Curved Upward 3 = Curved Downward 4 = Variable



Average Beak Length, in cm. .954

[2] [2] Constrictions: 1 = None 2 = Slight 3 = Deep

[5].[5] Average Number of Seeds per Pod

20

7. SEED COLOR:

[3] 1 = Shiny 2 = Dull 3 = Semishiny 4 = Variable

[1] 1 = Monochrome 2 = Polychrome

[0 1] Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other _____

[ ] Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other _____

[1] Color Pattern: 1 = Solid 2 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted

[1] Hilar Ring: 1 = Absent 2 = Present

[ ] Hilar Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other _____

8. SEED SHAPE AND WEIGHT:

[2] Shape of Seed Taken From Middle of Pod: 1 = Round 2 = Oval 3 = Cuboid 4 = Kidney 5 = Truncate Fastigate

[1 8] Dry Seed Weight in g/100g Seeds (Adjusted to 12% Moisture)

9. ANTHOCYANIN PIGMENTATION:

1 = Absent
2 = Present

[1] Flowers [1] Stems [1] Pods [1] Seeds

[1] Leaves [1] Petioles [1] Peduncles [1] Nodes

10. KNOWN DISEASE REACTION:

DISEASES - COMMON NAME: Anthracnose, Rust, Powdery Mildew, Fusarium Root Rot, Pythium Root Rot, Rhizoctonia Root Rot, Pythium Wilt, Sclerotinia White Mold, angular Leaf Spot, Bacterial Wilt, Halo Blight, Fuscous Blight, Common Bacterial Blight, Red Node Virus, Pod Mottle Virus, Bean Common Mosaic Virus, Bean Yellow Mosaic Virus, Curly Top Virus, Bacterial Brown Spot, Bean Southern Mosaic Virus, Other (Specify) _____

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

[2] Disease: CN Bean Common Mosaic Virus; SN Bean Common Mosaic Virus; Race(s) see comments;

[2] Disease: CN Anthracnose; SN Colletotrichum lindemuthianum; Race(s) Race 7;

[1] Disease: CN Antrhacnose; SN Colletotrichum lindemuthianum; Race(s) Race 73;

[1] Disease: CN Anthracnose; SN Colletotrichum lindemuthianum; Race(s) Race 65;

[ ] Disease: CN _____; SN _____; Race(s) _____;

[ ] Disease: CN _____; SN _____; Race(s) _____;

11. KNOWN INSECT/NEMATODE RESISTANCE:

PESTS - COMMON NAME: Aphids, Bean Pod Weevil, Bruchid Beetle, Corn Earworm, Flea Beetle, Leaf Hopper, Lesion Nematode, Lygus, Mexican Bean Beetle, Root Know Nematode, Corn Seed Maggot, Spider Mites, Thrips, Weevils, Western Bean Cutowrm, Other (Specify) _____

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

[ ] Pest: CN _____; SN _____; Race(s) _____;

[ ] Pest: CN _____; SN _____; Race(s) _____;

[ ] Pest: CN _____; SN _____; Race(s) _____;

12. KNOWN PHYSIOLOGICAL STRESS REACTION:

1 = Susceptible 2 = Resistant
Heat
3 = Tolerant 4 = Avoidance

[ ] [ ] Cold [ ] Drought [ ] Air Pollution

13. COMMENTS:

Anthracnose resistance to race 7 and susceptibility to race 73 were shown in our test with Jim Kelly at Michigan State University.

01054 carries the "I" gene which confers resistance to Bean Common Mosaic Virus (BCMV), but is sensitive to the temperature insensitive necrosis inducing strains of BCMV like NL3 and NL8.

Dry Edible Navy Bean

'HMS MEDALIST'
~~'01054'~~ WAL 4/22/05

Exhibit D

Botanical Description

Navy '01054' is a medium season variety that flowers in 53 days and matures in 96 days in Idaho. It is an upright medium profile variety (type IIb, CIAT classification) holding pods off the ground.

The leaves are wrinkled, semiglossy, ovate with acuminate apices, and mostly obtuse leaf bases.

Flowers are white and pods are green which turn yellow at maturity.

The seeds average 18 g per 100 seeds.

'01054' has an average of 5.5 seeds per pod

'01054' has the "I" gene which confers resistance to Bean Common Mosaic Virus (BCMV), but is sensitive to the temperature insensitive necrosis inducing strains of BCMV like NL3 and NL8.

When compared to 'Vista' in Michigan the following observations have been made.

- Seed size and appearance is similar to Vista.
- Depending on the season and location '01054' will mature approximately the same as Vista.
- '01054' has shown a 96 lbs. yield advantage over Vista from trials in the following Michigan counties: Huron, Bay, Gratiot, Tuscola, Montcalm, and Sanilac.

'01054' has shown broad adaptability in the MINDAK (Minnesota, North Dakota, South Dakota, and Manitoba) region, Michigan, Idaho, Nebraska, and Washington. Adaptability trials are planned for other parts of the United States and Canada.

REPRODUCE LOCALLY. Include form number and edition date on all reproductions. FORM APPROVED - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Cooperative Elevator Co.	01054	'HMS MEDALIST' MAW 4/22/08
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
7211 E. Michigan Ave. Pigeon, MI 48755	(989) 453-4500	(989) 453-3942
	7. PVPO NUMBER	#200700330

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ YES ☐ NO

10. Is the applicant the original owner? ☑ YES ☐ NO **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☐ YES ☐ NO **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☐ YES ☐ NO **If no, give name of country**

11. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

Dr. Ronald Shellenberger, plant breeder, doing business as ProVita, Inc. has a contractual agreement to provide a plant breeding and variety development service on navy beans to Cooperative Elevator Company. Cooperative Elevator Company pays consulting fees and expenses to ProVita, Inc. for which Cooperative Elevator Company retains ownership of all navy bean varieties developed under the agreement.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	TEMPORARY OR EXPERIMENTAL DESIGNATION
Cooperative Elevator Co.	7211 E. Michigan Ave. Pigeon, MI 48755	01054
		VARIETY NAME 'HMS MEDALIST' LAW 4/22/08
NAME OF OWNER REPRESENTATIVE (S)	**ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)***	FOR OFFICIAL USE ONLY
Ron Shellenberger ProVita, Inc.	P.O. Box 628 Kuna, ID 83634	PVPO NUMBER #200700330

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Ronald K Shellenberger 5-11-07

Signature Date